

ABSTRACT OF THE DISCLOSURE

The invention relates to a call control method for handoff guarantee in a mobile terminal for minimizing handoff failure rate which continuously guarantees the same quality of service is during handoff of an existing call from the current cell into a new cell in a high-speed radio communication network which is constituted of micro-cells to support multimedia traffic. The bandwidth reservation is performed in the adjacent cells, call approval control is performed by temporarily storing a handoff request into a queue when an available bandwidth is insufficient, and a radio bandwidth is dynamically managed so as to efficiently use communication network resources. Further, new call block rate and handoff failure rate are periodically monitored for adaptation to dynamic variation of the communication network traffic state, by which the amount of a reserved bandwidth is dynamically adjusted according to the state so as to efficiently use communication network resources.